**Diver Activity – Investigating Buoyancy**

**Buoyancy** is the **force** thatcauses an object to float. It is an **upward** force made by a fluid that opposes the weight of an object.

If an object floats, it is **positively buoyant.**

If an object sinks, it is **negatively buoyant.**

If an object is suspended in a fluid, it is **neutrally buoyant.**

**Draw a buoyancy diagram for your pop bottle diver at each type of buoyancy (positively, negatively, and neutrally buoyant).**

**Include the forces acting on the diver (Gravitational force and buoyant force).**

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| **Positively Buoyant** |
|  |
| **Negatively Buoyant** |
|  |
| **Neutrally Buoyant** | |
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**1) Why did the diver float at the beginning?**

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**2) What changed when you squeezed the bottle? Observe the diver carefully to help answer this question.**

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**3) At what point in the experiment was the buoyant force the greatest? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4) At what point in the experiment was the gravitational force the greatest?**

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